

Before the
Federal Communications Commission
Washington, D.C. 20554
FCC Docket No. 93-154
PR Docket No. 93-85

In the Matter of

Amendment of Part 97 of the
Commission's Rules Concerning
Message Forwarding Systems in
the Amateur Service.

) FCC Docket No. 93-154
) PR Docket No. 93-85

RECEIVED
JUN 25 1993
FCC MAIL ROOM

June 21, 1993

To: The Federal Communications Commission

COMMENTS OF Bruce Engelbrecht

1 I am the operator of a voice repeater in the state of Oregon. As a voice repeater operator I am interested in the development of rules that will encourage the orderly development of packet and phone stations in the Amateur Radio Service. As a voice repeater operator I have invested a significant amount of my own personal funds into the development of voice repeaters. My station is available and ready to use during any emergency and I strongly support Amateur Radio Service contributions to public service.

2 Support of the intent of the proposal.

I believe that, with proper safeguards, the accountability for retransmitted violative communication should be the responsibility of the station creating the communication. We contend that, when the station originating a communication can be reliably determined, the originating station should bear sole responsibility for the content of the communication. However, we are supportive of the Commission's intent in proposing to clarify responsibility for violative communications. I accept the objectives described in the summary "to hold the licensee and control operator of the station originating a (RTTY or digital) message and the control operator of the first forwarding station...". We believe the proposal is at least a partial solution to the present dilemma outlined.

No. of Copies rec'd
List A B C D E

10 Copies
6

3 **Unintended consequences of the proposed language.**

I am disturbed that, as proposed, the wording of the rule changes has extensive unintended consequences that are injurious to the Amateur Radio Service, including repeater and packet network operations, in particular.

4 **Purpose not accomplished.**

I notice that the proposed language does not accomplish the Commission's stated purpose, to reduce the impact upon packet communications and clarify which stations are responsible for the content of messages. The purpose is not accomplished when the responsibility is placed on stations that are unable to comply.

5 **Extensive language not required.**

Although it is enticing to add new language, as is proposed in this docket, the additional language is not required to accomplish the purpose of the docket.

6 **The Commission's purpose achieved simply.**

The Commission's intent clarifying responsibility for violative communications, may be achieved more directly and without the unintended results discussed hereinbelow by substituting the following rules in place of the proposed rules in the NPRM:

7 **Proposed 97.109(f).**

The control operator of a station that inadvertently retransmits violative phone or image emission communications is not accountable for violative communications.

8 **Proposed 97.109(g).**

The control operator of the station originating an RTTY or Digital message and the control operator of the first station which receives and stores the message, prior to retransmission of that message, are accountable for violative communications that are retransmitted.

9 **Language extent.**

10 Some of the concerns that I have with the proposed language are:

11 **Proposed definition of (97.3(a)(28)), is imprecise.**

In the proposed definition of "Message forwarding system" (97.3(a)(28)), terms employed therein are undefined. The functionality described, forwarding a message, is a retransmission of communications. This functionality is common to packet, phone and image stations. The resulting application of this section is unclear. The language in the section can equally apply to a number of different communication capabilities, and would also apply to the manual relay system used by the National Traffic System (NTS). A reasonable person will interpret the language as applying to phone stations, image stations, packet stations, facsimile stations, or the manual NTS system.

12 **Proposed definition of 97.3(a)(36), is inconsistent with technology and practice.**

Regarding proposed 97.3(a)(36), the definition of "Repeater", contains various terms and requirements that are problematic. As proposed the definition of a repeater would be changed from a functional definition to one based on technical attributes. This language is at variance with present practice for stations retransmitting phone and image communications within the Amateur Radio Service:

13 (1) **The term "instantaneously" excludes common place technology.**

The term "instantaneously" excludes the majority of existing phone repeaters, due to the widespread practice of intentionally delaying a retransmitted communication to suppress squelch tails and to prevent transmitter activation by short transmissions where no communication is intended (Kerchunkers). This intentional delay is a common feature of modern repeater controllers that are readily available off the shelf.

14 (2) **"different channel" restricts existing spectrum efficient stations.**

The use of more than one channel is not required to implement a repeater. Although not as common, Amateur Radio Service repeaters operate do on a single channel to provide communications around obstructed locations. Existing simplex repeaters used to provide communications in valleys, tunnels or buildings are excluded. Additionally, the development of spectrum efficient technology will be hindered.

15 (3) **"angle-modulated" prohibits common practice and future development.**

This term unreasonably restricts repeaters to a single emission type. In practice, angle-modulation, vestigial sideband AM, ACSSB and other emission types are all commonly used for repeaters. Fast scan image repeaters are exclusively Amplitude Modulated, VSB or SSB transmissions. Further, the future use of advanced emission types is discouraged.

16 **Proposed definition of 97.3(a)(36), is imprecise.**

In attempting to define repeaters, based on technology and emission criteria, the proposed language is imprecise and restrictive. For example, were an operator of an HF station to hold his microphone near the speaker of a 2 meter FM receiver to manually retransmit a signal, the operator would have created an unlawful repeater as he is instantly retransmitting the FM signal of another station in restricted HF spectrum. Further if a station were assembled which automatically retransmits on 14.265 MHz the signals received on 14.340 MHz, the station would not be a repeater if the received signals were not angle modulated, or if the signals were delayed slightly so as to not be an instantaneous retransmission. Such an automatic retransmitting station would be within the proposed rules, provided that a control operator were available.

17 **Proposed definition of 97.3(a)(36), is imprecise.**

19 The proposed 97.217 is unnecessary and directed inappropriately.

The proposed section 97.217 is not necessary to establish responsibility for the content of RTTY and digital messages. The wording proposed in 97.217 is directed at cooperative systems of stations. These stations would be undefined in the proposed rules.

20 The proposed 97.217 is incomplete.

The proposed wording of 97.217 is incomplete. The proposed section does not contain a coordination provision such as 97.201(c). Further, there is no description of authorized frequencies as is included in 97.201(b), 97.203(d), 97.205(b), and others.

21 The proposed language of 97.217(a) is unnecessary.

Since operators within the Amateur Radio Service may, as a matter of course, form cooperative networks or systems of stations, this language, which does not address the operation of stations, is unnecessary. Further this language is not required to accomplish the objective of this docket.

22 The proposed 97.217(b) does not accomplish the purpose of this Docket.

The proposed paragraph contains the only language implementing the Commission's purpose in this docket. However, the language has a defect which will hinder resolution of the problem.

23 Defect contained in the proposed language of 97.217(b).

As presently worded, the language places a portion of the burden for violative communications upon the first station retransmitting the communications without regard to the capability of the station. Some stations retransmitting RTTY or digital communications are in possession of only a small portion of the communications at any one time. Other stations receive and store messages prior to distribution of messages within the network. Only the latter stations are able to accomplish the purpose of this docket.

24 Proposed changes are far reaching.

As noted hereinabove the proposed changes are far reaching and the impact of these changes are generally negative for the Amateur Radio Service. I support the simple approach outlined above. This simple language accomplishes the Commission's objective.

25 Segments of the Amateur Radio Service excluded from the process.

I am further concerned about lack of involvement of segments of the Amateur Radio Service impacted by aspects of this Docket. The venue of this docket, as reported in the docket summary, and the Amateur Radio Service press, is the responsibility for violative content of packet messages. No national Amateur Radio Service organization has made any attempt to involve the phone repeater, ATV, coordination or other segments of the community that are affected by the proposed language. The limited discussion within the ARRL expressly excluded repeater operators, ATV and coordinators which are negatively impacted by the docket.

26 The greatest care is required.

While it may be possible to successfully draw the kinds of subtle distinctions between types of stations attempted in the Docket, this must be done with the greatest care. Such massive changes will require the careful thought and involvement of the broadest spectrum of Amateur Service operators. Without that involvement, the attention to detail and careful crafting of language which prevents harm to the Amateur Radio Service has not taken place.

27 The wise course.

I believe the wise course is to limit the scope of action in this docket to only those changes necessary to accomplish the Commission's purpose. Any other course is likely to open a pandora's box of requests for rule making to correct defects and limitations of the proposed language.

Respectfully submitted,
Bruce Engelbrecht